AMENDMENTS TO THE CLAIMS:

This listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended)

A dehydrated composition, useful for mammalian therapy, comprising:

substantially shelf-stable freeze-dried platelets selected from the mammalian species for which therapy is intended, the platelets being effectively loaded with trehalose by fluid phase endocytosis to preserve biological properties during freeze-drying and rehydration, wherein the platelets are rehydratable so as to have a normal response to at least one agonist.

Claim 2 (original)

The dehydrated composition as in Claim 1 wherein the amount of trehalose loaded inside the freeze-dried blood platelets is from about 10mM to about 50 mM.

Claim 3 (original)

The dehydrated composition as in Claim 1 wherein the normal response to at least one agonist is a response to thrombin in a physiological concentration.

Claim 4 (original)

The dehydrated composition as in Claim 1 wherein the preserved biological properties are mediated via characteristic platelet surface receptors.

Claim 5 (original)

The dehydrated composition as in Claim 1 wherein the at least one agonist is selected from the group consisting of thrombin, collagen, restocetin, and ADP.

Claim 6 (original)

The dehydrated composition as in Claim 1 wherein the composition is substantially shelf stable at ambient temperatures.

Claim 7 (original)

The dehydrated composition as in Claim 1 wherein the effective loading includes incubating platelets at a temperature from greater than about 25 °C so as to uptake external trehalose via fluid phase endocytosis.

Claim 8 (original)

The dehydrated composition as in Claim 1 wherein the platelets are human platelets.

Claim 9 (original)

The dehydrated composition as in Claim 1 wherein the freeze-dried platelets before freeze-drying are characterized by a homogenous distribution of trehalose therein of about 20 mM.

Claim 10 (original)

The dehydrated composition as in Claim 1 wherein moisture is in an amount not greater than about 5 weight percent.

Claim 11 (original)

The dehydrated composition as in Claim 1 further including a therapeutic agent selected from the group consisting of an antibiotic, an antifungal, a growth factor, and mixtures thereof.

Claim 12 (currently amended)

A therapeutic composition, comprising:

platelets <u>effectively loaded with trehalose by fluid phase endocytosis to preserve biological properties and</u> having a homogeneously distributed concentration of a therapeutic agent therein, the platelets determinable to have a normal response to thrombin.

Claim 13 (original)

The therapeutic composition as in Claim 12 wherein the determinable normal response to thrombin is clot formation within about three minutes at 37° C.

Claim 14 (original)

The therapeutic composition as in Claim 12 wherein the therapeutic agent includes an anti-thrombic agent, an antibiotic, an anti-mitotic agent or an anti-angiogenic agent.

Claim 15 (currently amended)

A hemostasis aid, comprising:

~~Substantially~~ substantially shelf-stable freeze-dried platelets selected from the mammalian species for which therapy is intended, the platelets being effectively loaded with trehalose to preserve biological properties during freeze-drying and rehydration, wherein the platelets are rehydratable so as to have a normal response to at least one agonist; and,

~~A~~ a biocompatible matrix on which the platelets are carried.

Claim 16 (original)

The hemostasis aid as in Claim 15 wherein the platelets are coated on or impregnated in the matrix.

Claim 17 (currently amended)

The hemostasis aid as in Claim 15 wherein the matrix ~~is~~ comprises a woven or non-woven bandage, wound dressing, or suture.

Claims 18-25 (cancelled)

Claim 26 (currently amended)

A therapeutic process of using a dehydrated composition, comprising:

~~Providing~~ providing freeze-dried platelets selected from a mammalian species for which therapy is intended, the platelets being effectively loaded with trehalose to preserve biological properties; and,

applying the freeze-dried platelets to a wound or burn of the selected mammalian species.

Claim 27 (original)

The process as in Claim 26 wherein the freeze-dried platelets are carried on a biologically compatible matrix.

Claim 28 (original)

The process as in Claim 26 wherein the freeze-dried platelets are rehydrated prior to or upon application to the wound or burn.

Claim 29 (original)

The process as in Claim 26 wherein the freeze-dried platelets are prehydrated in moisture saturated air before application.

Claim 30 (original)

The process as in Claim 29 wherein the prehydrated, freeze-dried platelets are rehydrated following prehydration.

Claim 31 (original)

The process as in Claim 29 wherein the prehydration is conducted at about 37° C for between about one hour to about three hours.

Claim 32 (original)

The process as in Claim 29 wherein the prehydration is sufficient to bring the water content of the freeze-dried platelets to between about 35 weight percent to about 50 weight percent.

Claim 33 (new)

The hemostasis aid as in Claim 15 wherein said platelets being effectively loaded with trehalose by fluid phase endocytosis to preserve biological properties.

Claim 34 (new)

The therapeutic process of Claim 26 wherein said platelets being effectively loaded with trehalose by fluid phase endocytosis to preserve biological properties.